



Transportation Demand Management (TDM) Techniques (DRAFT)

What is TDM?

TDM is a general term for policies or tools that encourage a shift from driving trips to other modes. It is often implemented at employment sites, but is applicable to multifamily developments for managing parking supply. Pricing is frequently used as the “stick,” with other complementary elements used as “carrots.”

What Tools Are Relevant for Multifamily Projects?

Unbundled Parking – Above all other programs, unbundled, or parking priced separately from housing, can have the most effect at managing the supply of residential parking. This method allows residents to pay for only the amount of parking they need, and potentially save on overall housing costs. Based on elasticity research, a direct cost of \$100 per month for parking would lead to a 5% to 13% decrease in vehicle ownership. Local results indicate that parking prices are more closely correlated with lower parking utilization in dense environments where free parking options are fewer and transit or walk options are more readily available.

As part of the development process, pricing surveys of local sites are often used to determine pro forma parking revenue. External parking opportunities and availability are also considered. Once a project reaches stabilization, pricing adjustments are made from additional surveys or based on property supply/demand.

Prices can also be set in progressive increments, with spaces after the first commanding a higher price. Leasing spaces (as opposed to selling them for condo units) and adjusting the rates on an annual basis give flexibility to ensure that prices keep pace with demand and the local market. For overall effectiveness, on-site pricing needs to be coupled with on-street parking management.

Carshare – Carshare can be a natural complement to priced parking. A study of sites in San Francisco with unbundled parking *and* carshare showed an average reduction in resident vehicle ownership from 1 vehicle per household to 0.76 vehicles per household. Separate studies have documented that each car share vehicle replaces

between 2-6 privately owned cars. In line with this finding, a recent study of users found that 67% opted not to purchase a second car based on having carshare available.

To incentivize carshare, developers can provide dedicated spaces for carshare companies and/or a reduced cost or free 1-year membership for new tenants. While traditional carshare (Zipcar) are site-based, there are also new point-to-point (Car2Go) and peer-to-peer (informal, personal) carshare types that are growing in use.

Transit Tools – Initial site design can emphasize a project’s connection to transit. Ongoing programs include providing tenants with transit passes (either annual passes or Orca Cards pre-loaded with a set balance) and ensuring that new and existing tenants are aware of local transit options. In a 2003 survey of residential tenants in Redmond and Renton where transit passes were provided, 50% of tenants increased their transit ridership after moving to the development.

Other Elements –

- Accessible and secure bike parking – Makes storage and use more convenient while eliminating clutter caused by improper bicycle storage. Recommendations in other cities call for one secure bicycle parking space per dwelling unit.
- Communication and education – Residents are often unhappy about paying for parking, but offering other incentives, explaining it is the norm in the neighborhood, and detailing that lower housing costs are the result may help address concerns. New residents should be made aware of local transportation options including transit and carshare.

Examples of Incorporating TDM:

Thornton Place – Priced parking, residents receive Orca Card with \$235, designed with link to Northgate Transit Center, Zipcar membership with cars located adjacent to site.

Kirkland City Requirements – Passed enabling zoning for residential suites with 0.5 parking spaces per unit if developers charge separately for parking, provide bus passes or a similar transit subsidy, provide commute information to new tenants, and provide secure and covered bicycle parking.

This document is a high-level summary from a forthcoming review of pricing and TDM practices related to multifamily housing.